

II. AMENDMENT

A. In the Specification:

Upon review of the amendment submitted on December 19, 2005 it has been observed that two conflicting instructions were included on page 5 and similarly on page 6. In particular, on page 5, two instructions were requested to "... amend the paragraph at page 18, lines 8-16 as follows." It is respectfully submitted that the second instruction should have read as follows.

Please amend the paragraph at page 19, lines 10-26 as follows:

For example, the proteolytic enzyme trypsin is a serine protease that cleaves peptide bonds between lysine or arginine and an unspecific amino acid to thereby produce peptides that comprise an amine terminus (N-terminus) and lysine or arginine carboxyl terminal amino acid (C-terminus). In this way the peptides from the cleavage of the protein are predictable and their presence and/or quantity, in a sample from a trypsin digest, can be indicative of the presence and/or quantity of the protein of their origin. Moreover, the free amine termini of a peptide can be a good nucleophile that facilitates its labeling. Other exemplary proteolytic enzymes include papain, pepsin, ArgC, LysC, V8 protease, AspN, pronase, chymotrypsin and carboxypeptid[e]ase C.

For example, a protein (e.g. protein Z'') might produce three peptides (e.g. peptides B, C and D) when digested with a protease such as trypsin. Accordingly, a sample that has been digested with a proteolytic enzyme, such as trypsin, and that when analyzed is confirmed to contain peptides B, C and D, can be said to have originally comprised the protein Z''. The quantity of peptides B, C and D will also correlate with the quantity of protein Z'' in the sample that was digested. In this way, any determination of the identity and/or quantify of one or more of peptides B, C and D in a sample (or a fraction thereof), can be used to identify and/or quantify protein Z'' in the original sample (or a fraction thereof).

Similarly, on page 6, two instructions were requested to "... amend the paragraph at page 21, line 25 to page 22, line 6 as follows: It is respectfully submitted that the second instruction should have read as follows.

Please amend the paragraph at page 24, lines 22-31 as follows:

For example, the analyte might be a peptide that resulted from the degradation of a protein using an enzymatic digestion reaction to process the sample. Protein degradation can be accomplished by treatment of the sample with a proteolytic enzyme (e.g. trypsin, papain, pepsin, ArgC, LysC, V8 protease, AspN, pronase, chymotrypsin or carboxypeptid[e]lase C). By determination of the identity and amount of a peptide in a sample mixture and identifying the sample from which it originated, optionally coupled with the determination of other peptides from that sample sample, the precursor protein to the degraded peptide can be identified and/or quantified with respect to the sample from which it originated. Because this method allows for the multiplex determination of a protein, or proteins, in more than one sample (i.e. from a sample mixture), it is a multiplex method.

Accordingly, it is requested that the specification be amended as indicated and that the faulty instructions at pages 5 and 6 of the response dated December 19, 2006 be disregarded.